



# COUNTY OF LOS ANGELES

## DEPARTMENT OF PUBLIC WORKS

*"To Enrich Lives Through Effective and Caring Service"*

GAIL FARBER, Director

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January 20, 2010

IN REPLY PLEASE

REFER TO FILE: PR-0  
A3168-10

TO: Each Supervisor

FROM: Gail Farber   
Director of Public Works

**BOARD MOTIONS OF SEPTEMBER 8 AND 15, 2009  
AGENDA ITEMS 61-A AND 54-D  
AUGUST/SEPTEMBER 2009 WILDFIRES  
TENTH DISASTER RECOVERY REPORT – JANUARY 20, 2010**

The August/September series of wildfires resulted in significant damage to County roads and infrastructure in the Angeles National Forest. On September 8, 2009, your Board made a finding that an emergency situation existed that required immediate measures be undertaken to repair the damage, restore access to homes and businesses, and prevent and reduce potential flooding and damage due to mudflows. Your Board authorized the Director of Public Works to negotiate and execute emergency construction contracts, amend existing service contracts, and enter into new short-term contracts. In accordance with the Public Contract Code, Government Code, and County Code, your Board must review the necessity of these emergency contracting procedures every 14 days. As part of this requirement, attached is the tenth Disaster Recovery Report.

In view of ongoing disaster recovery activities, it is recommended that your Board determine: (1) there is still a need to continue the emergency action and (2) the Executive Office continue to place this item on the agenda for Board review every 14 days in accordance with Section 22050 of the Public Contract Code, the California Emergency Services Act (Government Code, Section 8550 et seq.), and Section 2.68.120 of the Los Angeles County Code.

BS:al

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Attach.

cc: Chief Executive Office (William T Fujioka, Lari Sheehan)  
Executive Office

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Public Works Expenditures as of January 20, 2010

Total Expenditures (including overtime)	\$ 9,619,394
Total Encumbrances	\$ 2,826,949
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Total Expenditures and Encumbrances	\$ 12,446,343
Total Overtime <sup>1</sup>	\$ 857,907

**Notes:**

- <sup>1</sup> Overtime represents the amount paid to the employee (straight time + premium time). It does not match the posted amount in eCAPs and what is posted to the general ledger. It represents all overtime paid through December 31, 2009.

**COORDINATED AGENCY RECOVERY EFFORT (CARE)**

The CARE team continues distributing copies of the Homeowner's Guide for Flood Debris and Erosion Control at community meetings and provides an electronic version of the Guide on the CARE website.

The dedicated CARE website also provides updated information about mudflow forecasts and road closures as well as links to other fire recovery and storm preparation information for residents' use, during storm periods.

The CARE team has completed the "Danger Debris Flow" public service announcement, which features an introduction from Supervisor Michael D. Antonovich, for broadcast on city cable TV channels.

**FOOTHILLS INCIDENT MANAGEMENT TEAM**

The Foothills Incident Management Team, which includes the County Fire, Sheriff, and Public Works Departments and the County Office of Emergency Management; continues to plan mobilization protocols to handle debris flow incidents and evacuations during storms.

**PIO TRAINING PROGRAM DESIGN EFFORT**

Public Works' Public Information Officer (PIO) attended the first working group meeting in conjunction with Los Angeles County's CARE Foothills Incident Planning and PIO

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team held at the Los Angeles County Emergency Operations Center on Thursday, November 19, 2009.

Topics discussed included an update on the planning for CARE Foothills Incident PIO team in reference to coordinating multi-jurisdictional incident information and to establish a process to track and share incident information between agencies; and to start the planning process for designing disaster/emergency training exercises in regards to PIO duties and responsibilities that is scheduled to take place in 2010.

**ROAD REOPENING-TRAFFIC COMMITTEE**

The Station Fire caused damage to guardrail, signage, and pavement markings on Angeles Crest Highway (State Route 2), which is under the maintenance purview of Caltrans. We have remained in close contact with Caltrans and the US Forest Service (USFS) during the recovery phase of this disaster to ensure that steady progress is made towards reopening Angeles Forest Highway to commuter traffic in tandem with the reopening of Angeles Crest Highway. Angeles Crest Highway, Angeles Forest Highway, Big Tujunga Canyon Road, and Upper Big Tujunga Canyon Road were fully reopened on November 30, 2009.

In support of the USFS goals of keeping commuters from stopping their vehicles and entering forest lands and due to our own concern of vehicles parking in an active construction zone, we will be posting "no parking with tow-away provision" that will be in effect for much of Angeles Forest Highway, Big Tujunga Canyon Road, and Upper Big Tujunga Canyon Road.

**TRANSPORTATION**

**Palos Verdes Fire**

No impacts reported.

**Morris Fire**

**Glendora Mountain Road and East Fork Road**

Closed on August 25, 2009. The roads were reopened on October 1, 2009. Wooden covers for rural catch basins have been damaged. Road Maintenance Division (RMD) estimates the cost to replace the catch basin covers is \$10,000. Operational Services Division (OSD) reported that 20 signs related to flood control facilities have been damaged/destroyed. OSD estimates the cost to replace the signs at \$2,500.

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**Station Fire**

**Angeles Forest Highway – Mt. Emma Road/Angeles Crest Highway**

Closed on August 26, 2009, and was fully reopened on November 30, 2009. It was closed again on December 12, 2009, at 12:01 a.m. due to the storm and reopened again on December 21, 2009, at 12:01 a.m., concurrent with Caltrans' reopening of Angeles Crest Highway. Due to the recent storm, it was closed on January 17, 2010, at 4 a.m., between Aliso Canyon Road and Angeles Crest Highway and remains closed. This road has a reported Average Daily Traffic (ADT) volume of 4,544 vehicles. It is a commuter route used by residents of the Antelope Valley.

Design Division (DES) estimates the cost of guardrail repairs at \$1,050,000. OSD reports that approximately 400 roadway signs were destroyed, and the cost to replace the signs is estimated to be \$80,000. OSD completed the sign replacement work on September 24, 2009. OSD has also restored the striping and raised pavement markers at an estimated cost of \$20,000. RMD completed the removal of 546 burned trees. RMD has reviewed 172 existing culverts and has determined that 49 locations need trash rack or standpipe to mitigate the effects of mud/debris flow during storms. Five locations on Angeles Forest Highway will be done by force account and the rest will be by contract. We received the USFS approval letter for this work on October 30, 2009. Plans have been completed. The construction contract was awarded on November 12, 2009. Construction started on December 2, 2009, and is scheduled to be completed by January 2010.

Plans for replacement of the guardrail were completed on September 11, 2009. The construction contract was awarded on September 24, 2009. Construction was completed on November 25, 2009. Pipe gates on Angeles Forest Highway just south of Angeles Crest Highway and just north of Aliso Canyon Road will be constructed by the contractor through a change order to aid in closing this road to traffic when needed during storms/disasters. The pipe gate installations were completed in early January 2010.

DES has completed the contract plans to replace the fire-damaged bridge railings on the Mill Creek bridge at Angeles Forest Highway. The work will be added as a change order to the Angeles Forest Highway guardrail replacement project. The work is estimated to begin in late January 2010 and take three weeks to complete. The cost for this work is estimated to be about \$230,000. In the interim, DES requested MD 5 to install temporary K-rails and crash cushions at this location. MD 5 has installed the temporary K-rails and crash cushions at an estimated cost of \$20,000.

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RMD installed by force account approximately 6,720 linear feet of K-rails at various locations along the shoulders of Angeles Forest Highway to keep mud and debris off the roadway during storms. The cost to purchase and install these K-rails is estimated at \$276,000. The K-rail installation was completed on November 16, 2009.

Big Tujunga Canyon Road – L.A. City Boundary/Angeles Forest Highway

Closed on August 28, 2009, and was fully reopened on November 30, 2009. It was closed again on December 12, 2009, at 12:01 a.m. due to the storm. The road was reopened on December 13, 2009, at 7:05 p.m. Due to the recent storm, it was closed on January 17, 2010, at 4 a.m. and remains closed. This road has a reported ADT of 825 vehicles.

DES estimates the cost of guardrail repairs at \$560,000. OSD completed the replacement of 200 roadway signs effective September 24, 2009, at an estimated cost of \$40,000. OSD has also restored the striping and raised pavement markers at an estimated cost of \$10,000. RMD completed the removal of 150 burned trees. RMD has reviewed 60 existing culverts and has determined 35 locations that need trash rack or standpipe to mitigate the effects of mud/debris flow during storms. We received the USFS approval letter for this work on October 30, 2009. Plans have been completed. The construction contract was awarded on November 12, 2009. Construction started December 2, 2009, and is scheduled to be completed by January 2010.

RMD recommended installing by force account approximately 2,140 linear feet of K-rails at various locations along the shoulders of Big Tujunga Canyon Road to keep mud and debris off the roadway during storms. The cost to purchase and install these K-rails is estimated at \$88,000. The K-rail installation was completed on November 2, 2009.

Plans for replacement of the guardrail were completed on September 16, 2009. The construction contract was awarded on September 28, 2009. Construction was completed on November 25, 2009. Pipe gates on Big Tujunga Canyon Road just east of Vogel Flats Road and just north of Angeles Forest Highway will be constructed by the contractor through a change order to aid in closing this road to traffic when needed during storms/disasters. The pipe gate installations were completed in early January 2010.

Upper Big Tujunga Canyon Road – Angeles Forest Highway/Angeles Crest Highway

Closed on August 28, 2009, and was fully reopened on November 30, 2009. It was closed again on December 12, 2009, at 12:01 a.m., due to the storm and fully reopened again on December 21, 2009, at 12:01 a.m., concurrent with Caltrans' reopening of Angeles Crest Highway. Due to the recent storm, it was closed on January 17, 2010, at 4 a.m. and remains closed. This road has a reported ADT of 176 vehicles.

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DES estimates the cost of guardrail repairs at \$1,120,000. OSD has replaced approximately 100 roadway signs effective September 24, 2009, at an estimated cost of \$21,000. OSD completed the sign replacement work on September 24, 2009. OSD has also restored the striping and raised pavement markers at an estimated cost of \$9,000. RMD completed the removal of approximately 400 burned trees. RMD has reviewed 84 existing culverts and has determined that 36 locations need trash rack or standpipe to mitigate the effects of mud/debris flow during storms. We received the USFS approval letter for this work on October 30, 2009. Plans have been completed. The construction contract was awarded on November 17, 2009. Construction started on December 2, 2009, and is scheduled to be completed by January 2010.

RMD recommends installing by force account approximately 1,100 linear feet of K-rails at various locations along the shoulders of Upper Big Tujunga Canyon Road to keep mud and debris off the roadway during storms. The cost to purchase and install these K-rails is estimated at \$45,000. The K-rail installation was completed on November 16, 2009.

Plans for replacement of the guardrail were completed on September 21, 2009. The construction contract was awarded on October 1, 2009. Construction was completed on November 25, 2009. Pipe gates on Upper Big Tujunga Canyon Road just west of Angeles Crest Highway and just east of Angeles Forest Highway will be constructed by the contractor through a change order to aid in closing this road to traffic when needed during storms/disasters. The pipe gate installations were completed in early January 2010.

Aliso Canyon Road – Angeles Forest Highway/Ave Y-8

Closed on August 30, 2009. Reopened on September 3, 2009. DES and RMD estimate that guardrail repairs at bridge approaches for Bridge No. 3797 will cost \$49,000. This work is included in the guardrail contract for Angeles Forest Highway. All tree removals due to the Station Fire have been completed as of December 19, 2009. OSD has replaced the approximately 20 roadway signs that were destroyed by the fires at an estimated cost of \$5,000. OSD has also restored the striping and raised pavement markers at an estimated cost of \$3,000.

Mt. Emma Road – 47th Street East/Angeles Forest Highway

Closed on August 30, 2009. Reopened on September 3, 2009.

Little Tujunga Canyon Road – Gold Creek Road/Sand Canyon Road

Closed on August 29, 2009. Reopened on September 6, 2009. RMD conducted a detailed survey of the guardrails and found no fire-damaged guardrails. Upon field

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review, OSD reports no damage to the roadway signs and striping. RMD found no trees or roadway drainage structures impacted by the fire.

Sand Canyon Road

Closed on August 29, 2009. Reopened on September 9, 2009. OSD reports no damage to the roadway signs and striping. RMD found no trees or roadway drainage structures impacted by the fire.

Mt. Wilson Red Box Road

Closed on August 29, 2009. The road was reopened by emergency personnel on September 28, 2009. Due to the recent storm, it was closed on January 19, 2010, and remains closed except to emergency vehicles, residents, and contractors. DES conducted a detailed survey of the guardrails and found no fire-damaged guardrails. OSD reports no damage to the roadway signs. OSD has restored the striping at an estimated cost of \$4,000. RMD completed the removal of approximately 23 burned trees. RMD has assessed roadway drainage structures and recommended trash rack/standpipes at eight locations. This work will be done by County forces. This work was completed on December 5, 2009.

Stonyvale Road at Vogel Flats Road – This road was closed on December 13, 2009, due to a mudslide from the recent storm and reopened again on December 15, 2009, at 1 p.m.

Other

Needed drainage inlet upgrades, such as trash racks and stand pipes, have been identified by RMD along Angeles Forest Highway, Big Tujunga Canyon Road, Upper Big Tujunga Canyon Road, and Mt. Wilson Red Box Road to protect these roads from storm flows. The work was divided into three contracts, allowing for up to three contractors to be working at the same time. The estimate to install these improvements is \$957,400 of which \$211,400 will be done by force account and \$746,000 by contract. We received the USFS approval letter for this work on October 30, 2009. The construction contract was awarded on November 12, 2009. Construction began on December 2, 2009, and is scheduled to be completed by January 2010.

The removal of 1,124 fire damaged trees along Angeles Forest Highway, Big Tujunga Canyon Road, Upper Big Tujunga Canyon Road, Mt. Wilson Red Box Road, and Aliso Canyon Road was completed on October 4, 2009. This work was done by force account and emergency contract at an estimated cost of \$704,000. RMD estimates approximately 1,700 trees/shrubs need to be removed within the culvert inlet areas, which will be done by force account at an estimated cost of \$270,000. All tree removal due to the Station Fire was completed on December 19, 2009.

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Approximately 42,000 cubic yards of debris is recommended to be removed from the culvert inlet areas by force account at an estimated cost of \$800,000. This work began on November 16, 2009, and is scheduled to be completed by January 22, 2010.

As a result of the recent rain storms that began on December 12, 2009, there is additional mud and debris that will need to be removed from the roadways and culvert inlets. Damage estimate assessment efforts are currently estimated at an additional \$400,000. Due to the recent storms, additional mud and debris will need to be removed from the roadways and culverts. A cost estimate for this work is being developed.

RMD replaced 548 burned culvert markers at an estimated cost of \$20,000. This work was completed on November 6, 2009.

The total number of raised reflective markers installed was 4,300.

Some of the call boxes along Angeles Forest Highway were damaged during the fire. Public Works is currently working with the Los Angeles County Metropolitan Transportation Authority - Service Authority for Freeways and Expressways (SAFE) to have the damaged call boxes repaired. In addition, we are also trying to have SAFE install additional call boxes at the pipe gates at the following locations:

- Angeles Forest Highway, west of Angeles Crest Highway (SR-2).
- Angeles Forest Highway, approximately 50 feet south of south pavement extension of Aliso Canyon Road.
- Big Tujunga Canyon Road, approximately 50 feet east of east pavement projection of Vogel Flats Road.
- Upper Big Tujunga Canyon Road at Angeles Crest Highway (SR-2).
- Upper Big Tujunga Canyon Road at Angeles Forest Highway.
- Big Tujunga Canyon Road at Angeles Forest Highway.

However, staff from SAFE has indicated that the call boxes are cellular; so if cellular service is not available for a normal cell phone user, then it will not be available for a call box. SAFE will have technicians check the signal strength in January 2010 to see if this is feasible.

**PUBLIC WORKS BUILDING DAMAGE**

**Palos Verdes Fire**

No impacts reported.



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**Morris Fire**

No impacts reported.

**Station Fire**

The Assistant Dam Operator's residence at Big Tujunga Dam was destroyed in the Station Fire. Project Management Division II (PMD II), County Disaster Assistant Team, and the Office of Emergency Services inspected the house at Big Tujunga Dam on October 10, 2009. The demolition and removal of debris was completed on November 6, 2009. The actual cost for the demolition work was \$13,850, and FMD will not rebuild the residence.

The office and crew quarters (1,800 sf) at the RD 557A yard at Mill Creek were destroyed in the Station Fire. Architectural Engineering Division (AED) estimates the demolition and cost to rebuild will be \$1,185,000. The work will likely be performed under a Job Order Contract.

**OTHER COUNTY DEPARTMENTS BUILDING DAMAGE**

No impacts reported.

**PRIVATE PROPERTY DAMAGE**

**Palos Verdes Fire**

Three structures in the City of Rolling Hills suffered eave/roof damage. Building and Safety (B&S) is working with the City to assist residents with erosion control advice and with building permits for any necessary fire damage repairs.

**Morris Fire**

No impacts reported.

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**Station Fire**

As of September 10, B&S staff has inspected 67 properties with destroyed or damaged structures as reflected in the following table:

OCCUPANCY	DESTROYED (100%)	DAMAGED (<100%)
Dwellings	32	4
Cabins	26	1
Detached Garage	23	3
Accessory (RES)	19	8
Commercial	1	2
Other	8	2
Total	109	20

The number of affected properties/structures may grow as new locations are discovered by the Fire Department and/or reported by the public. Damage estimate is not available at this time.

B&S is currently working with property owners to facilitate the proper demolition of the destroyed structures and the removal of debris. Property owners have been advised to (1) contact their insurance companies prior to cleanup, (2) verify that utilities have been cleared for safety by the utility companies (gas, electrical, and water), and (3) use a licensed contractor to perform the cleanup.

A demolition permit must be obtained from B&S. A 10-day notification to South Coast Air Quality Management District (SCAQMD) is required prior to cleanup along with the filing of a construction debris recycling plan with Environmental Programs Division (EPD). BFI has provided 30 large debris roll-off bins free of charge for community cleanups, directly benefiting 44 property owners.

EPD coordinated with various agencies to begin collecting and managing household hazardous waste and asbestos. As a result, the State Department of Toxic Substances Control funded the cleanup of household hazardous waste for 34 properties, of which 23 also received free asbestos cleanup.

In addition, EPD worked with the Los Angeles and Lahontan Regional Water Quality Control Boards to authorize the acceptance of fire debris at Sunshine Canyon, Puente Hills, Chiquita Canyon, Antelope Valley, and Lancaster Landfills.

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Browning Ferris Industries and Waste Management Inc., are working with community groups and town councils to provide donated roll-off bins for community cleanup efforts and to provide discounted gate rates at Sunshine Canyon and Lancaster Landfills, respectively, for all self-hauled fire debris. In addition, Browning Ferris Industries is providing discounted roll-off bin services for individual property owners, including making available one-hundred \$150 vouchers on a first-come, first-served basis. As of December 31, 2009, 38 vouchers have been issued (or reserved) by residents, of which 16 vouchers have been redeemed.

In coordination with our B&S, EPD has waived all waste diversion requirements for debris from fire-damaged structures and removed the need for property owners to make an extra trip to Public Works' headquarters.

**COMMUNICATION SYSTEMS**

**Palos Verdes Fire**

No impacts reported.

**Morris Fire**

A communication line at the San Gabriel Dam facility was damaged as a result of the Morris Fire and has been repaired at a cost of approximately \$5,000.

**Station Fire**

Communication lines and poles at the Big Tujunga Dam facility were damaged. ITD will work with OSD to determine reconstruction options (e.g. poles versus underground) and provide estimated costs. ITD is unaware of communication damage to Pacoima Dam as a result of the Station Fire.

The Road Weather Information System (RWIS) at RD 557A (Mill Creek) is not operational. ISD is assessing the cost to repair the system.

ITD determined there is no communication damage to Cogswell Dam and Mt. Disappointment. Both sites are on generator power.

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**FLOOD CONTROL SYSTEM**

**Palos Verdes Fire**

No impacts reported. Mudflow phase maps have been completed and are currently available through the Public Works and CARE websites.

**Morris Fire**

No impacts reported to flood control operation. Minor damages were sustained to phone line, power lines, and signage in the vicinity of Morris Dam. The cost to repair this damage is approximately \$100,000. Electricity has been restored to Morris Dam.

Post fire mudflow impacts to San Gabriel, Morris, and Cogswell Dams have been evaluated and recommendations were made for measures to prevent damage to facilities, maintain reliable dam operations, and provide dependable access on-site of these dams.

**Station Fire**

Post fire mudflow impacts to Big Tujunga Dam have been evaluated and recommendations were made for measures to prevent damage to facilities, maintain reliable dam operations, and provide dependable access on-site.

The clean-out of seven debris basins, namely Dunsmuir, Eagle, Gould, Mullaly, Pinelawn, Rowley, and Shields have been completed. The clean-out of Gould Upper Debris Basin commenced on November 9, 2009, and was completed on December 2, 2009. This work provides additional capacity for the anticipated increased volume of debris in the coming storm season resulting from the fire. The cost of the debris removal is estimated to be \$1.8 million.

WRD and DES have evaluated the need to increase storage capacity at six debris basins within the fire area, namely Big Briar, Mullaly, Snover, Pickens, Starfall, and Pinelawn. Scope of work and corresponding cost estimates have been developed for all with the exception of Rowley Debris Basin. The estimated cost for these temporary improvements is approximately \$650,000. Flood Maintenance Division (FMD) has completed the work at Mullaly, Snover, and Starfall Debris Basins. The temporary capacity enhancements for Pickens and Big Briar Debris Basins were completed on January 7, 2010, and January 11, 2010, respectively. In addition, WRD is still investigating and evaluating locations that may require rail and timber structures or similar type of structures to minimize property damage. WRD is pursuing the

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permanent enlargements to six undersized debris basins in burned watersheds of the Station Fire, namely Big Briar, Mullally, Snover, Pickens, Starfall, and Pinelawn. The concepts for all six have been developed. The design plans and specifications are scheduled to be completed by end on January 2010. The goal is to have all of the construction contracts awarded by the end of April using the emergency contract authority. All construction work is anticipated to be completed by October 15, 2010. The cost for these basin improvements is estimated to be approximately \$5 million.

Public Works Engineering Advice Teams have provided advice to approximately 480 residences within the City of La Canada-Flintridge, City of Glendale, City of Los Angeles, and the unincorporated County areas of La Crescenta, Big Tujunga, and Acton. WRD completed their efforts to provide engineering advice to residents of City of Los Angeles and have provided the City recommended mudflow phase maps for their use and consideration. Engineering advice is being provided on an "as-requested" basis.

OSD completed their inspection of the power lines at Big Tujunga Dam and an initial recovery scoping meeting with FMD, WRD, and OSD occurred on September 23, 2009. Electrical upgrades may likely be constructed with the recovery process. WRD will be providing project updates with schedules and estimates. A contractor will be needed to perform the work to bring power to the dam and outlying facilities.

Upon further investigation only one ALERT rain gauge station and one repeater were damaged or destroyed at Chilao and Mt. Gleason, respectively. The rain gauge and repeater have been replaced. The estimated cost to repair and/or replace the equipment is \$15,000.

WRD has entered into five funding agreements with the Natural Resources Conservation Service (NRCS) for the implementation of mudflow protective measures for residences along streets potentially impacted by mudflows as well as the installation of temporary capacity enhancements at four debris basins/inlets.

RMD has completed the installation of K-rail, sandbags, and associated crash barrels in La Canada-Flintridge and La Crescenta per approved agreements with NRCS. Approximately 2,000 sandbags have been installed to date.

Mudflow phasing maps for the unincorporated County areas of La Crescenta, Tujunga, Acton, as well as the Cities of La Canada-Flintridge, Glendale, and Los Angeles have been completed and are currently available on the DPW and CARE websites.

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FMD has constructed pipe and timber debris retaining walls at various locations in Dunsmuir Sediment Placement Site to keep the debris from going onto the residential streets. FMD amended an existing As-Needed Facility Sweeping contract under the Director's authority to increase the total contract amount by \$100,000 to sweep access roads for our various flood control facilities within the fire-impacted areas effective November 17, 2009.

**WATERWORKS SYSTEMS**

No impacts reported.

**COUNTY SEWER SYSTEMS**

No impacts reported.

**COUNTY AIRPORTS**

No impacts reported.

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County Funds

Total Damage Estimates		Total Estimated Cost	Disaster Assistance (High Probability)	Disaster Assistance (Possible)	Road Construction Program (SD5)	Road Fund (O&M)	Flood Fund (O&M)
<b>Transportation</b>							
Guardrail Repair and Replacement		\$ 2,730,000	\$ 2,392,000	\$ 41,000	\$ 297,000	\$ -	-
Signing and Striping Replacement/Restoration		207,000	205,000	-	-	2,000	-
Road Shoulder, Culvert, and Tree Debris Removal		5,722,000	3,542,000	782,000	-	1,398,000	-
Miscellaneous (Catch Basin, Headwall Repairs)		60,000	4,000	44,000	12,000	-	-
<b>Transportation Sub-Total</b>		<b>8,719,000</b>	<b>6,143,000</b>	<b>867,000</b>	<b>309,000</b>	<b>1,400,000</b>	<b>-</b>
<b>Public Works Buildings</b>							
Demolish Assistant Dam Operator House (Big T. Dam)		150,000	28,000	-	-	-	122,000
Office and Crew Quarters at RD 557A Subyard		1,185,000	900,000	-	-	285,000	-
<b>Public Works Buildings Sub-Total</b>		<b>1,335,000</b>	<b>928,000</b>	<b>-</b>	<b>-</b>	<b>285,000</b>	<b>122,000</b>
<b>Communication Systems</b>							
San Gabriel Dam		15,000	-	-	-	-	15,000
Pacoima Dam		30,000	-	-	-	-	30,000
Big Tujunga Dam		150,000	28,000	-	-	-	122,000
<b>Communication Systems Sub-Total</b>		<b>195,000</b>	<b>28,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>167,000</b>
<b>Flood Control</b>							
Repair Electrical System at Morris Dam		100,000	75,000	-	-	-	25,000
Repair Electrical System at Big Tujunga Dam		250,000	148,000	-	-	-	102,000
Repair/Replace Rain Gauges and Repeaters		15,000	-	-	-	-	15,000
<b>Flood Control Sub-Total</b>		<b>365,000</b>	<b>223,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>142,000</b>
<b>Total</b>		<b>\$ 10,614,000</b>	<b>\$ 7,322,000</b>	<b>\$ 867,000</b>	<b>\$ 309,000</b>	<b>\$ 1,685,000</b>	<b>\$ 431,000</b>

**RoadWay Culvert Upgrades and Debris Basin Cleanouts/Modifications Necessitated by the Fires**

<b>Transportation</b>							
Road Culvert Inlet Upgrades		\$ 1,977,000	990,000	658,000	329,000	-	-
Erosion Barriers (K-rails - Unincorporated Area)		732,000	530,000	75,000	127,000	-	-
<b>Transportation Sub-Total</b>		<b>2,709,000</b>	<b>1,520,000</b>	<b>733,000</b>	<b>456,000</b>	<b>-</b>	<b>-</b>
<b>Flood Control</b>							
Debris Basin Cleanout		1,800,000	1,000	-	-	-	1,799,000
Debris Basin Modification and Expansion		5,000,000	343,000	-	-	-	4,657,000
Erosion Barriers (K-rails - City of La Canada)		280,000	210,000	-	-	-	70,000
<b>Flood Control Sub-Total</b>		<b>7,080,000</b>	<b>554,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>6,526,000</b>
<b>Total</b>		<b>\$ 9,789,000</b>	<b>\$ 2,074,000</b>	<b>\$ 733,000</b>	<b>\$ 456,000</b>	<b>\$ -</b>	<b>\$ 6,526,000</b>
<b>Grand Total</b>		<b>\$ 20,403,000</b>	<b>\$ 9,396,000</b>	<b>\$ 1,600,000</b>	<b>\$ 765,000</b>	<b>\$ 1,685,000</b>	<b>\$ 6,957,000</b>

**County of Los Angeles Department of Public Works  
AUGUST/SEPTEMBER 2009 WILDFIRES EVENTS  
EMERGENCY CONSTRUCTION CONTRACTS**

ID	PROJECT NAME	DESCRIPTION/SCOPE OF WORK	ESTIMATED CONTRACT COST	CONSTRUCTION	
				ESTIMATED START DATE	ESTIMATED FINISH DATE
1	Station Fire - Angeles Forest Highway Guardrail Replacement	Guardrail Restoration.	\$ 700,000	October 2009	November 2009
2	Station Fire - Big Tujunga Canyon Road Guardrail Replacement	Guardrail Restoration.	\$ 465,000	October 2009	November 2009
3	Station Fire - Upper Big Tujunga Canyon Road Guardrail Replacement	Guardrail Restoration.	\$ 655,000	October 2009	November 2009
4	Angeles Forest Highway - Station Fire Culvert Improvement Project	Construct trash racks or standpipes in culvert inlet areas within MD 5.	\$ 240,000	December 2009	January 2010
5	Big Tujunga Canyon Road - Station Fire Culvert Improvement Project	Construct trash racks or standpipes in culvert inlet areas within MD 5.	\$ 251,000	December 2009	January 2010
6	Upper Big Tujunga Canyon Road - Station Fire Culvert Improvement Project	Construct trash racks or standpipes in culvert inlet areas within MD 5.	\$ 255,000	December 2009	January 2010
7	Tree Removal	Remove burned/dead trees within County roadways in MD 5.	\$ 550,000	September 2009	October 2009
8	Debris Basin Expansions	Provide additional capacity at the Big Briar, Mullaly, Snover, Pickens, Starfall, Pinelawn, and Rowley Debris Basins.	\$ 5,000,000	April 2010	October 2010
9	Mill Creek Bridge - Bridge Rail and Approach Guardrail Replacement	Repair and replace fire damaged bridge railing and approach guardrails at the Mill Creek Bridge at Angeles Forest Highway.	\$ 230,000	November 2009	February 2010
	<b>TOTAL AUGUST/SEPTEMBER 2009 WILDFIRES EMERGENCY CONSTRUCTION CONTRACTS</b>		\$ 8,346,000		